WHAT IS CLAIMED IS:

1. A position sensor for sensing linear or radial position, comprising:

at least two magnets;

a ferrous plate, having said at least two magnets located at spaced locations along said ferrous plate, said at least two magnets being oriented such that at least one magnet's north pole is directed toward said ferrous plate and at least one magnet's south pole is directed toward said ferrous plate; and

a magnetic flux responsive device, located proximate said ferrous plate.

2. The position sensor of claim 1, wherein said magnetic flux responsive device is at least one of a Hall effect device and a programmable Hall effect device.

3. The position sensor of claim 1, wherein said ferrous plate is substantially flat.

4. The position sensor of claim 1, wherein said ferrous plate varies in at least one of width, thickness and shape.

5. A position sensor for sensing linear or radial position, comprising:

at least four magnets;

a first ferrous plate having two of said at least four magnets located at spaced locations along said first ferrous plate, said two magnets being oriented such that a north pole of one of said two magnets is directed toward said first ferrous plate and a south pole of an other of said two magnets is directed toward said first ferrous plate;

a second ferrous plate having an other two of said at least four magnets located at spaced locations along said second ferrous plate, said two magnets being oriented such that a north pole of one of said two magnets is directed toward said second ferrous plate and a south pole of an other of said two magnets is directed toward said second ferrous plate, said first ferrous plate and said second ferrous plate being generally parallel and spaced apart; and

at least one magnetic flux responsive device disposed between said first ferrous plate and said second ferrous plate.

6. The position sensor of claim 5, wherein said magnetic flux responsive device is at least one of a Hall effect device and a programmable Hall effect device.

7. The position sensor of claim 5, further comprises at least one magnetic shunt disposed proximate to at least two of said at least four magnets.

8. The position sensor of claim 5, wherein said first ferrous plate and said second ferrous plate are both generally shaped as one of circular and cylindrical, said first ferrous plate and said second ferrous plate each having an air gap.

9. The position sensor of claim 5, further comprises a plurality of magnetic ferrous plate assemblies, each magnetic ferrous plate assembly comprising:

four magnets; and

two linear ferrous plates, each of said two linear ferrous plates having two of said four magnets located at spaced locations along each of said two linear ferrous plates, said two linear ferrous plates being generally parallel with each other and spaced apart;

each said magnetic ferrous plate assembly configured to allow said at least one magnetic flux responsive device to traverse therethrough.

10. The position sensor of claim 5, wherein at least one of said first ferrous plate and said second ferrous plate varies in at least one of width, thickness and shape.

11. A position sensor for sensing radial position, comprising:

two magnets including a first magnet and a second magnet;

two ferrous plates being generally shaped as one of circular and cylindrical, each said ferrous plate having an air gap, said two ferrous plates including a first ferrous plate and a second ferrous plate, said first magnet being oriented with a north pole disposed toward an end of said air gap in said first ferrous plate and a south pole disposed toward an other end of said air gap, said second magnet being oriented with a north pole disposed toward an end of said air gap in said second ferrous plate and a south pole disposed toward an other end of said air gap, said first ferrous plate and said second ferrous plate being generally parallel and spaced apart; and

at least one magnetic flux responsive device disposed between said first ferrous plate and said second ferrous plate.

12. The position sensor of claim 11, wherein said magnetic flux responsive device is at least one of a Hall effect device and a programmable Hall effect device.

13. The position sensor of claim 11, further comprising at least one magnetic shunt disposed proximate to at least one of said two magnets.

14. The position sensor of claim 11, wherein said north pole of said first magnet is generally directed in a direction contra to said north pole of said second magnet.

15. The position sensor of claim 11, wherein at least one of said two ferrous plates varies in at least one of width, thickness and shape.

16. The position sensor of claim 11, wherein said at least one magnetic flux responsive device produces an electrical signal relative to the sensed magnetic flux density.

17. A method for making and installing a device for sensing one of linear and radial position, comprising:

spacing a first ferrous plate and a second ferrous plate apart in a generally parallel manner;

orienting two magnets toward said first ferrous plate and two additional magnets toward said second ferrous plate such that a north pole of one said magnet and a south pole of an other said magnet are directed toward said first ferrous plate and a north pole of yet an other said magnet and a south pole of still yet another magnet is directed toward said second ferrous plate;

positioning a magnetic flux responsive device between said first ferrous plate and said second ferrous plate such that movement of said magnetic flux responsive device relative to said first ferrous plate and said second ferrous plate alters the magnetic field in said magnetic flux responsive device; and

mounting said ferrous plates to a structure including one of a foot pedal, a throttle, an EGR valve, a shaft and a headlight leveling system, and said magnetic flux responsive device on an other structure, said magnetic flux responsive device and said ferrous plates configured to move relative to each other.